

National Park Service
U.S. Department of the Interior

Yellowstone National Park
Winter Use Adaptive Management Program



Human Dimensions Working Group Update

June 4, 2014
Jackson, WY

Winter Use Objectives

- Provide the opportunity for visitors to experience and be inspired by Yellowstone's unique winter resources and values while ensuring resource protection.
- Increase visitor understanding and appreciation of the park's winter resources.
- Provide access for winter opportunities in the park that are appropriate and universally accessible.

(NPS, 2013)

Adaptive Program Objectives

- Evaluate impacts of OSV use and help managers implement actions that keep impacts within the range predicted under the Selected Alternative.
- Gather additional data for comparability of impacts by a group of snowmobiles versus a snowcoach.
- Reduce impacts by gathering additional data regarding the overall social and ecological impacts of winter use and using those data to guide future management decisions.

(NPS, 2014)

Human Dimensions

- Uses social science to understand conservation values and benefits along with management preferences and effects
- Considers ecological, recreational, health and safety; economic, aesthetic, and emotional aspects
- Focuses on how stakeholders value park resources
([NPS, 2014](#))

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Summary of Science

- Very to extremely high visitor satisfaction levels
- Natural soundscape is important
- Bison viewing is important
- Snowmobile and snowcoach riders are similar
([NPS, 2013](#))

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Summary of Science

- Opportunities for greater understanding
 - Attitude differences
 - Activity substitution and visitor displacement
 - Soundscape responses
- (NPS, 2013)

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Working Group Process

- February 18 – Emerging Topics
 - Visitor travel patterns
 - Visitor demographic characteristics
 - Visitor safety
 - Soundscape studies
 - Visitor motives, values and experience preferences
 - Regional perspectives
 - Displacement

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Working Group Process

- March 18 – Clarifying Issues
 - Focus on oversnow park interior
 - Interest in systematic links between all winter use and OSV area use
 - Visitor safety
 - Travel pattern interest reiterated
 - Visitors using OSVs to access non-motorized areas

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Working Group Process

- April 10 – Looking Ahead
 - Identify needs
 - Overview document detailing working group status
 - Prioritization of conditions for monitoring
 - Continued interest in park entry point data sets

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Working Group Process

- April 28 – Checking In
 - Group reviews early rough draft of introduction and summary of science sections for chapter.
 - Group review and rank potential issues for monitoring organized in terms of OSV impacts to evaluate, OSV impacts to compare, and OSV impacts needing increased understanding.

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Working Group Process

- May 22 – Talking Things Over
 - Acknowledge variety of impact issues
 - Flexibility remains for issue and protocol selection
 - Expect to benefit from checking other groups' processes for common vision and direction
 - Human Dimensions impacts chapter being drafted

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Monitoring Priorities

- Evaluating impact topics
 - Working group ranked impact topic importance for each adaptive program objective
 - 1) Evaluating impact indicators;
 - 2) Comparing impacts;
 - 3) Understanding impacts to improve conditions.
 - Number of asterisks (*) from 0-4 indicates perceived group importance level.

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Monitoring Priorities

- Evaluating OSV impacts
 - Soundscape satisfaction****
 - Wildlife viewing satisfaction****
 - Recreational motives, values, and experience preferences**
 - Air quality satisfaction*
 - User density satisfaction

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Monitoring Priorities

- Comparing OSV impacts
 - Compare wildlife viewing experience satisfaction****
 - Compare visitors' soundscape experience satisfaction***
 - Compare air quality experience satisfaction*
 - Compare attitudes, preferences, and norms
 - Compare user density satisfaction

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Monitoring Priorities

- Increasing OSV impact understanding
 - Examine recreational displacement impacts***
 - Examine activity substitution**
 - Examine socioeconomic impacts**
 - Examine visitor use and travel patterns**
 - Examine attitudes, preferences, and norms

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Next Steps: Protocols

- Protocols – rules or procedures used while collecting data
 - Specify when, where, and how data are collected.
 - Articulate clear, standardized definitions for data collectors.
 - Give specific procedures for training the workforce to collect and record data.

Next Steps: Protocols

- Topics to be evaluated
- Procedures for data collection (survey, interviews, focus groups etc.)
- Frequency of data collection
- Processes to ensure data integrity

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Protocols

- Evaluation

- Engage visitors, managers, guides, or other stakeholders

- Observation

- Use systematic data collection without need to engage or burden visitors

- Compilation

- Use ongoing and past data collection archives to detect patterns and trends

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Protocols by Objectives

Protocol type

Evaluate impacts

Evaluation

Survey soundscape, wildlife viewing, and air quality satisfaction; motives, values and experience preferences.

Observation

Observe incident reports, soundscape and air conditions; wildlife encounters, visitor encounter rates, travel and activity patterns.

Compilation

Compile past soundscape and air condition data; visitor satisfaction levels, and travel patterns.

Protocols by Objectives

Protocol type

Compare impacts

Evaluation

Survey soundscape, wildlife viewing, and air quality satisfaction among OSV user groups.

Observation

Observe differences in soundscape, wildlife viewing, and air quality conditions among OSV user groups.

Compilation

Compile past data and findings comparing OSV user groups.

Protocols by Objectives

Protocol type

Inform future decisions

Evaluation

Survey visitor displacement, activity substitution, socioeconomic impacts; travel and activity patterns; and attitudes, preferences, and norms.

Observation

Observe visitor travel and activity patterns; and encounter rates.

Compilation

Compile past data and findings on displacement, substitution, travel and activity patterns.

Overlaps with Other Groups

- Air quality and soundscape
- Operations and technology
- Wildlife impacts
- Non-commercially guided snowmobile access program

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Questions, Comments, Concerns?

References

- National Park Service. (2013). *Yellowstone National Park winter use plan / Supplemental environmental impact statement*. Yellowstone National Park, WY, MT, ID: U. S. Department of the Interior, National Park Service, Yellowstone National Park. Retrieved from: <http://parkplanning.nps.gov/document.cfm?parkID=111&projectID=40806&documentID=51874>
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